

CLAIMS

What is claimed is:

1. A satellite positioning receiver device, comprising:
 - a GPS RF receiver that receives a plurality of positioning signals.
 - a multifunction portion of the satellite positioning receiver device that selectable executes one of a first function and a second function, where the multifunction portion is in communication with the GPS RF receiver; and
 - a controller that selects which one of the first function and the second function is executed by the multifunction portion associated with a type of data derived from at least one positioning signal from the plurality of positioning signals.
2. The device of claim 1, further comprising:
 - a microprocessor that process the at least one positioning signal in the multifunction portion.
3. The device of claim 2 where the at least one position signal is processed by the microprocessor rather than a DSP when the first function is executed by the multifunction portion.
4. The device of claim 1, further comprising:
 - a custom DSP that process the at least one positioning signal when a first function is executed by the multifunction portion.

5. The device of claim 1, where the first function is a sensor function.
6. The device of claim 1, where the first function is an engine function.
7. The device of claim 1, where the first function and the second function are selected from a list of functions composed of a sensor function, an engine function, and a tracker function.
8. The device of claim 1, where the controller includes:
an input that indicates an emergency indicator; and
a sensor function is executed by the multifunction portion in response to receipt of the emergency indicator by the controller.
9. The device of claim 1, where the type of data associated with the first function is digital RF data.
10. The device of claim 1, where the type of data associated with the first function is I and Q measurement data.
11. The device of claim 1, including:
a communication receiver that receives another of the plurality of positioning signals and is in communication with the multifunction portion.

12. A method of determining location at a satellite positioning receiver, comprising:
receiving a plurality of positioning signals at a GPS RF receiver;
selecting at a controller a function from a plurality of functions that will be executed by a multifunction portion of the satellite positioning receiver;
configuring the multifunction portion of the satellite positioning receiver according to the function selected; and
processing in the multifunction portion at least one of the plurality of positioning signals that results in a type of positioning data.
13. The method of claim 12, where processing further includes:
processing the at least one positioning signal in the multifunction portion by a microprocessor.
14. The method of claim 12, wherein the processing of the at least one positioning signal is processed by the microprocessor rather than a DSP when the function is executed by the multifunction portion.
15. The method of claim 12, further including:
processing the at least one positioning signal with a custom DSP when the function is executed by the multifunction portion.

16. The method of claim 12, where selecting the function, further includes:
selecting a sensor function.
17. The method of claim 12, where selecting the function, further includes:
selecting an engine function.
18. The method of claim 12, where the plurality of functions include at least a sensor function, an engine function, and a tracker function.
19. The method of claim 12, includes:
indicating an user event to the controller.
20. The method of claim 19, further includes:
indicating the user event is an E911 call; and
configuring the multifunction portion as a sensor function.
21. The method of claim 12, where the type of positioning data associated with the function is digital RF data.
22. The method of claim 12, where the type of positioning data associated with the first function is I and Q measurement data.

23. A computer readable medium having a plurality of instructions for determining a location of a satellite positioning receiver, the plurality of instructions comprising:

a plurality of instructions for receiving a plurality of positioning signals at a GPS RF receiver;

a plurality of instructions for selecting at a controller a function from a plurality of functions that will be executed by a multifunction portion of the satellite positioning receiver;

a plurality of instructions for configuring the multifunction portion of the satellite positioning receiver according to the function selected; and

a plurality of instructions for processing in the multifunction portion at least one of the plurality of positioning signals that results in a type of positioning data.

24. The computer readable medium of claim 23, where the plurality of instructions for processing further includes:

a plurality of instructions for processing the at least one positioning signal in the multifunction portion in a microprocessor.

25. The computer readable medium of claim 24, wherein the plurality of instructions for processing of the at least one positioning signal is processed by the microprocessor rather than a DSP when the function is executed by the multifunction portion.

26. The computer readable medium of claim 23, further including:

a plurality of instructions for processing the at least one positioning signal with a custom DSP when the function is executed by the multifunction portion.

27. The computer readable medium of claim 23, where the plurality of instructions for selecting the function, further includes:

a plurality of instructions for selecting a sensor function.

28. The computer readable medium of claim 23, where the plurality of instructions for selecting the function, further includes:

a plurality of instructions for selecting an engine function.

29. The computer readable medium of claim 23, where the plurality of functions include at least a sensor function, an engine function, and a tracker function.

30. The computer readable medium of claim 23, includes:

a plurality of instructions for indicating an user event to the controller.

31. The computer readable medium of claim 30, further includes:

a plurality of instructions for indicating the user event is an E911 call; and

a plurality of instructions for configuring the multifunction portion as a sensor function.

32. The computer readable medium of claim 23, where the type of positioning data associated with the function is digital RF data.

33. The computer readable medium of claim 23, where the type of positioning data associated with the first function is I and Q measurement data.